



the WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

2001 DWSRF Loan Facts

- Interest rate on 20 year loans 2.5%
- Loan limit \$3 million per system
- Loan limit \$6 million for projects involving multiple systems
- Reduced interest rates for systems in distressed counties
- Reduced interest rates for systems in disadvantaged communities
- No local match required
- 2% loan fee

New!

No service meter requirement for 2001

- Most Group A community and nonprofit, noncommunity water systems are eligible
- Financing available to both public and privately owned water systems
- Over \$21 million available for project loans

Public application workshops in March 2001

Applications due June 4, 2001

Funds should be available by Spring of 2002

Drinking Water State Revolving Fund: *Striving to Improve Public Health*

Significant progress has been made by the Drinking Water State Revolving Fund the past four years towards putting affordable system repairs and upgrades within reach of small and medium-sized water systems in Washington State.

Public water system capital improvements are critical to the long-term health and economic vitality of Washington's communities.

Washington's DWSRF program has become quite competitive. In the 2000 loan cycle, for the first time ever, there were more requests for project funds than there were funds available. Changes to this year's program include elimination of service meter requirements as a condition of receiving a DWSRF loan. If you don't plan to include service meters in your project, this is the year to apply!

Over \$86 million dollars have been committed to drinking water infrastructure improvements in Washington since the state DWSRF program was introduced in 1997. Washington is a national leader in launching this important funding source and getting the money out to public water systems.



Issue 44 • February 2001

See Inside For More DWSRF News:

- *Changes and Highlights*
- *Who's Getting the Money*
- *What you can do*
- *Important Water System Plan Requirement*
- *Workshop Registration*

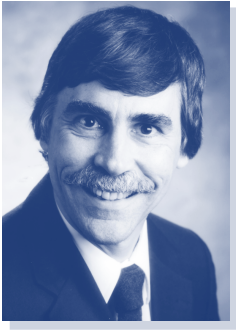


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THE DIRECTOR'S COLUMN

BY GREGG GRUNENFELDER



Operators Must Be Trained for the Job

The man in charge of the water system that caused a deadly E. coli outbreak in Canada last year reportedly did not have the educational background and experience to prevent that disaster. (See related article at right.) The tragedy in Walkerton is an extreme but all too real example of what can happen when the

importance of the water system operator's job is taken lightly.

The state Department of Health is working hard to make sure no water system operator finds him or herself making statements like those in the article at right. Recently expanded operator certification and training requirements, and upcoming new programs designed to deliver high-quality, convenient and inexpensive operator training, will help ensure that experienced, well-trained professionals deliver safe drinking water in Washington.

I've fielded many questions about new Operator Certification requirements, particularly about our criteria for continuing education units (CEUs). In 1999, we strengthened our criteria to make it clear we expect operators to attend training that is directly relevant to the operation, maintenance or management of a water system, and that has an influence on water quality, public health or environmental protection.

While many operators have applauded our more clear focus, it has drawn criticism from some. Let me put it bluntly: Do you want your family drinking water overseen by someone who met the continuing education requirements by taking classes in chainsaw maintenance, vehicle brake repair and defensive driving? Or someone who met the requirements by attending courses on safe chlorination techniques, protecting wells from contamination and responding to drinking water emergencies?

Please support us in doing our part to make sure no Washington public water system operator ever faces a tragedy like Walkerton because they did not have the training and knowledge necessary to prevent it.

.....

Who Makes CEU Decisions?

The Washington Environmental Training Center (WETRC) evaluates courses submitted for CEU (continuing education units) assignment, as well as manages several other aspects of the Water Works Operator Certification Program. WETRC does this work by contract with the state Department of Health. WETRC has drawn criticism as we've strengthened our criteria for CEUs. However, WETRC officials are simply conducting their work in accordance with Department of Health direction and criteria. For more information about CEUs and other operator certification issues, contact Cheryl Bergener, Department of Health, Division of Drinking Water, at 360-236-3137 or Cheryl.Bergener@doh.wa.gov.

Water manager couldn't handle E. coli outbreak

by Matt Mossman *The Associated Press*

WALKERTON, Ontario - The plant manager at the center of an E. coli outbreak that killed seven people in this Ontario town apologized publicly for the first time yesterday, telling an inquiry he didn't know how to deal with the catastrophe. "Words cannot begin to express how sorry I am," Stan Koebel told a government-ordered inquiry board.

Koebel was in charge of the water plant in this town 90 miles west of Toronto when the wells were contaminated with E. coli bacteria last spring. The outbreak killed seven people and sickened 2,300. "I didn't have enough educational background and experience," the 47-year-old Koebel said while on the stand for seven hours yesterday.

Koebel's lawyer, Bill Trudell, has argued his client is just one person among several who should take responsibility, including local health officials and provincial water regulators. Koebel's testimony was his first public comment since May, when flooding is believed to have swept E. coli-laced cattle manure into town wells. Koebel had managed the utility for 12 years.

E. coli is an intestinal bacterium that causes cramps, diarrhea and, in extreme cases, kidney failure. The worst known E. coli contamination in the United States killed four people in 1993 and was traced to tainted hamburger in Washington state.

Koebel has also become a focus of anger as testimony revealed chronic problems with the water system and reports of a tentative deal to pay him almost \$65,000 to resign.

Koebel told the board that he was never given tests to prove he could handle the job before he was hired as plant manager in 1988. He was unable to explain several technical terms during testimony yesterday. People began getting sick less than a week after the May 12 flooding, and Koebel received test results on May 18 that showed E. coli contamination, Mayor David Thomson has said.

Koebel then apparently tried to fix the problem himself by adding chlorine and flushing the system instead of notifying town and health officials as required. A regional health official issued a boil order for Walkerton water on May 21, but by the time the provincial government took control of the water system on May 25, five people had died and hundreds were hospitalized. More died or were sickened later.

Trudell tried to get Koebel excused from testifying, arguing he was emotionally frail. Koebel underwent psychiatric testing earlier this month that found him fit to testify. Koebel's younger brother Frank, the water-plant foreman, has testified his brother ordered him to submit false information about the town's water to fend off regulators.

Frank Koebel said they guessed at proper chlorine levels because the scale to measure amounts was broken. Stan Koebel admitted in court testimony that he had provided false information about water samples.

December 19, 2000 Reprinted with permission of the Associated Press

Governor's Proposed Budget Supports Safe Drinking Water Programs

Governor Locke's proposed 2001-2003 budget contains \$4.6 million in additional resources to protect the health of Washington citizens by assuring safe, reliable drinking water. The proposal directs these additional funds to the Department of Health and local drinking water programs.

Addressing New Safe Drinking Water Act Requirements

The proposal directs \$2.5 million to the Department of Health to keep up with existing and implement new federal Safe Drinking Water Act requirements for the 4,200 largest public water systems in the state.

The funding will help the department tackle the substantial workload increase generated by new requirements, as well as bolster existing efforts to provide basic public health protection. Specific activities include evaluating new requirements and implementing them at the state level, inspecting water

systems to make sure health risks are prevented, making sure required water quality tests are taken, tracking and evaluating test results, taking action when tests show problems, and other key activities to ensure water systems understand and meet safe drinking water requirements.

Overseeing Washington's Smallest Public Water Systems

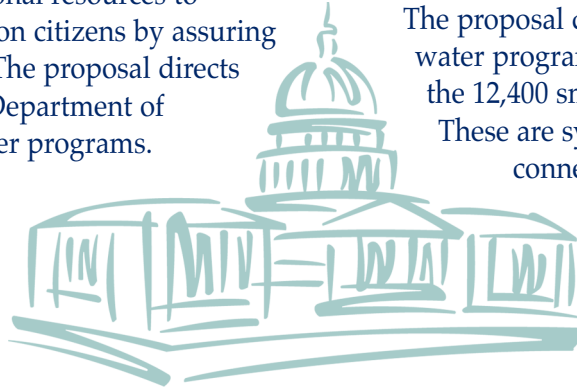
The proposal directs \$2.1 million to local drinking water programs, to provide regulatory oversight for the 12,400 smallest water systems in Washington.

These are systems that serve less than 15 connections and do not fall under the provisions of the federal Safe Drinking Water Act.

This funding will be targeted to local health jurisdictions, via contracts with the Department of

Health, to support local programs that assure required water quality tests are done, evaluate test results, respond to unsatisfactory results, and help the owners of these small systems meet state regulatory requirements.

This proposal is based on recommendations from the Water Supply Advisory Committee. For more information about the proposal, contact Janice Keller, 360-236-3098 or janice.keller@doh.wa.gov



Kennewick Public Works Director Chosen to Chair Advisory Committee

Kennewick Public Works Director Bob Hammond was chosen to chair the Washington Water Supply Advisory Committee at the group's January 2001 meeting.

"I appreciate the opportunity to influence state drinking water policy," Hammond said, "and look forward to helping state drinking water officials find creative solutions to key issues during these challenging and changing times."

Water policy has played a role in most of Hammond's engineering and management career. Prior to his appointment as director, he filled numerous positions over the last 11 years with Kennewick including managing operations and maintenance crews, administering large capital projects and overseeing water and wastewater planning including development of water rights protection strategies for the city. Hammond has also worked in the irrigation water resource policy arena.

The Water Supply Advisory Committee was formed by the Legislature to advise the Department of Health on drinking water policy and other water issues. The committee includes representatives of a range of drinking water interests, including utility owners and operators, consumers and environmental advocates.

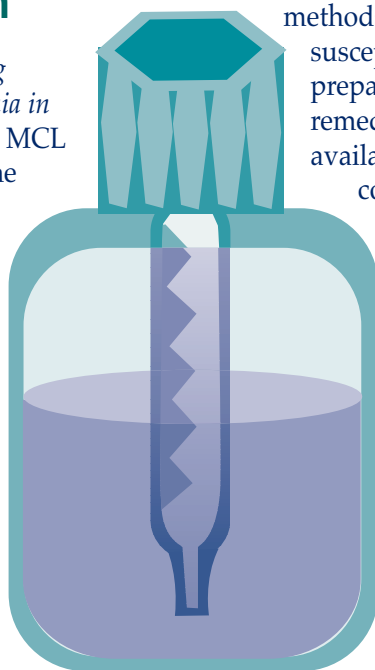


Strategy for Addressing Nitrates and Nitrites Emphasizes Monitoring and Notification

Nitrates and Nitrites - *classified as acute drinking water contaminants capable of causing severe anemia in infants and developing fetuses* - at or greater than MCL concentrations, is a high priority concern for the Division of Drinking Water. Recent program prioritizations have led to the development of a more focused approach to address nitrate/nitrite concerns throughout the state for all classes of water systems. The compliance strategy will emphasize monitoring and public notification requirements when nitrate/nitrite is found in excess of trigger levels or MCLs. Particular attention will be given to those systems using sources that exceed the MCL of 10.0 mg/L.

The compliance activities will first focus on the most severe nitrate/nitrite exceedances,

especially those greater than 20 mg/L, and then address all sources with confirmed nitrate/nitrite levels exceeding the MCL. MCL exceeders will be required to address high nitrate/nitrite levels through treatment or other methods that can assure health protection for susceptible populations. The Division has prepared materials that present various ways to remedy high nitrate sources and will make them available to all systems having nitrate/nitrite concerns.



The increased focus being placed on drinking water levels of nitrate/nitrite will be evident through the Division's increased level of compliance activity regarding nitrate/nitrites. Water systems will receive greater regulatory attention to insure compliance with required water quality monitoring, public notification, and remediation of any confirmed problems.

For more information, contact Jim Hudson (360) 236-3131.

Lead and Copper Rule Minor Revisions

On April 11, 2000, EPA made changes to the Lead and Copper Rule (LCR) that was first published in 1991. These revisions, referred to as the Lead and Copper Rule Minor Revisions (LCRMR), streamline reporting requirements and address issues arising from legal challenges to the 1991 rule. The Department of Health is currently revising chapter 246-290 WAC to reflect the federal revisions - a process that should be completed by April 2002.

As required by the 1991 LCR, all Group A public water systems should have completed their initial lead and copper tap water monitoring by now. Those whose 90th percentile levels do not exceed the action levels of 0.015 milligrams per liter (mg/l) for lead and 1.3 mg/l for copper may reduce the frequency of monitoring for lead and copper at the tap. A system that exceeds either action level must install corrosion control treatment.

The minor revisions do not change action levels, nor do they affect the rule's basic requirements to optimize corrosion control, treat source water if necessary, and deliver public education if the lead action level has been exceeded. In some cases, the revisions may reduce systems' monitoring, reporting, and public education requirements.

EPA's web site has a brief fact sheet on the revisions at <http://www.epa.gov/safewater/standard/leadfs.html>

More detailed fact sheets and guides to help states and public water suppliers implement the revisions are available at <http://www.epa.gov/safewater/lcrmr/implement.html>

For more information from the Department of Health, contact

Eastern Regional Office in Spokane	Scott Fink	(509) 456-2475
Northwest Regional Office in Seattle	Steve Hulsman	(253) 395-6777
Southwest Regional Office in Olympia	Belle Fuchs	(360) 586-5179

DWSRF Changes & Highlights

Competitive Loan Program

Washington's DWSRF program has become quite competitive. In the 2000 loan cycle, for the first time ever, there were more requests for project funds than there were funds available.

New Application Deadline

The deadline to submit DWSRF applications is **June 4, 2001**, a month earlier than past funding cycles.

Change in Workshop Format

A new workshop format is being used:

- 1) DWSRF application workshop/rule information;
- 2) PWTF application workshop;
- 3) Technical assistance on operational/capital finance challenges.

Potential applicants can get DWSRF and PWTF information at the same time, plus a technical assistance workshop all for free!

Elimination of Service Meter Requirement

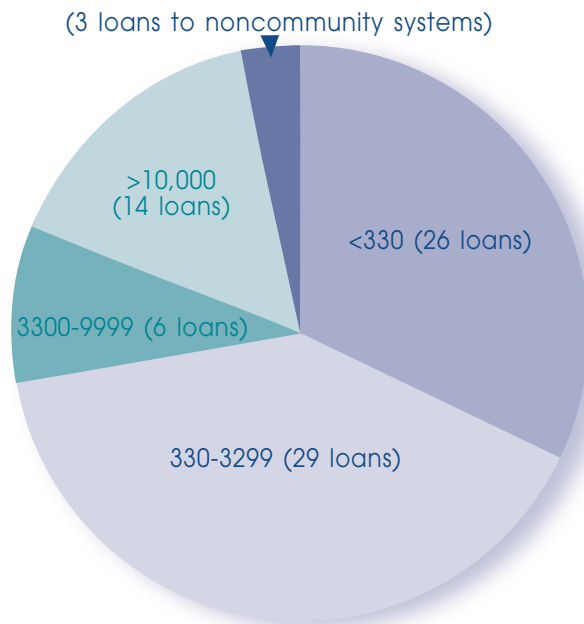
This year's projects will not be required to install service meters as a condition of receiving a DWSRF loan. If you don't plan to include service meters in your project, this is the year to apply! Projects funded in 2002 and beyond may be required to install service meters. This depends largely on the DWSRF program rule (see page 7). If you want to install meters, the cost of installing the meters is an eligible project cost that can be included in the project's scope of work.

Because many public water systems have difficulty affording financing for infrastructure improvements, Congress established the DWSRF program as part of the Safe Drinking Water Act Amendments of 1996. The DWSRF program provides loans and technical assistance to community and nonprofit noncommunity water systems to facilitate planning, design, financing, and construction of improvements aimed at increasing public health protection and compliance with primary drinking water regulations. Washington's DWSRF program is administered jointly by the Department of Health, the Public Works Board, and the Board's administrative agent, the Department of Community, Trade and Economic Development.

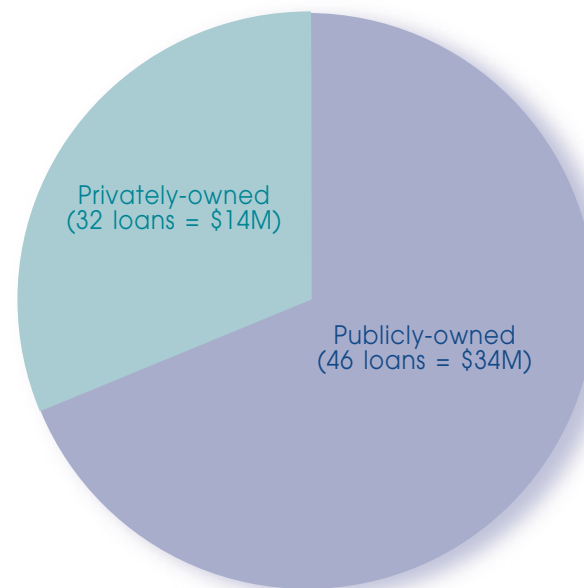
Who's Getting The Money

1997 - 1999 Application Cycles
78 Projects funded for \$48,912,430

*Community Systems Receiving Funding
(by population served)*



*Systems Receiving Funding
(by ownership)*



Note: At press time, the 2000 priority project funding list included 66 eligible projects requesting over \$55 million in DWSRF assistance. \$28.4 million is available. Funding will be offered, based on priority ranking, until the \$28.4 million has been obligated. Those falling below the funding cutoff will not be offered contracts. A number of these projects are also eligible for assistance from the Public Works Trust Fund and may choose to withdraw their DWSRF applications.



What You Can Do

Three of the top 10 projects on last year's priority funding list were mobile home parks, whose projects will eliminate water quality problems by connecting to municipal water systems. Twenty-one percent of the

applications remaining on our first four priority project funding lists address projects that were required pursuant to state or federal compliance actions (bilateral compliance agreements, orders, civil penalties). Another 19% were for projects that would have resulted in serious compliance problems if not addressed. Read on for examples of other projects being funded.

Orcas Golf Estates

In an effort to meet DOH standards for storage and pressure, Orcas Golf Estates will be constructing a new 20,000-gallon water storage tank and associated piping and appurtenances. In addition, approximately 800 feet of 6-inch transmission main, construction of a booster station consisting of a weather tight structure, booster pump, and pressure tanks, and approximately 12 service connections including meters.

County:	San Juan	
Project Funding:	DWSRF Loan	\$58,133.20
	Other Sources*	\$6,271.00
	Total Project Cost	\$64,404.20

Pend Oreille County PUD

The Riverbend Water System is currently using surface water from the Pend Oreille River to supply drinking water to an 80-lot subdivision. In order to be in compliance with federal and state drinking water quality requirements, the district will install a cartridge water filtration system in the existing pump house. In addition, a new chlorinator and tank float/

level controls will be installed to assure proper contact time and chlorination residuals.

County:	Pend Oreille	
Project Funding:	DWSRF Loan	\$289,884.00
	Total Project Cost	\$289,884.00

City of Sultan

The project consists of two separate components.

The first component expands the capacity of the existing water filtration plant from 1 mgd to 1.2 mgd to provide increased efficiency. The improvements include installation of an absorption clarifier, upgrade of existing filters, modulating valves, level sensors, pressure switch and Program Logic Controller (PLC) control, piping and valves, electrical and instrumentation, and miscellaneous equipment all in the existing filter plant building. This will allow Sultan to use the filter plant as the main source of domestic water for the near future.

The second component develops an alternate source of water supply. In order to accomplish this, the City will enter into an agreement with the City of Everett and the Snohomish County PUD, to build a new supply line connecting to Everett's Transmission Pipeline 5. The City will also enter into an agreement with the Snohomish County PUD in which the PUD's engineering department will prepare engineering drawings for the transmission pipeline and will manage construction. The agreement also calls for the PUD to share in the costs of construction of the pipeline and consequently have water-wielding rights in common with Sultan.

County:	Snohomish	
Project Funding:	DWSRF Loan	\$1,030,000
	Other Sources*	\$1,174,180
	Total Project Cost	\$2,204,180

Hat Island

The Hat Island Community, Inc., is a private non-profit organization formed by the residents of Hat Island in 1967.

The wells in the Hat Island community are experiencing problems with salt-water intrusion and rising chloride levels as a result of excessive or extended pumping from the sea level aquifer. In order to meet the demands for both permanent and seasonal residents, Hat Island Community, Inc., will purchase property and construct a 30-gallon-per-minute reverse osmosis desalination plant, which will draw water from seawater well. The construction components include: a sea water well, reverse osmosis equipment for the desalination plant, treatment plant building, and all associated piping to connect with the existing water system.

County:	Snohomish	
Project Funding:	DWSRF Loan	\$816,000
	Other Sources*	\$9,400
	Total Project Cost	\$825,400

Teronda West Country Club Assoc.

The existing water lines in the Association's service area are 36 year old iron pipes that are rusted and corroded to the point of being fragile. There have been repeated breaks in the line and the potential for cross contamination has been significant. In addition, water pressure is low because there is only gravity feed. In order to improve the system, and ensure safe drinking water, the project will include replacement of an aging waterline with approximately 2,600 LF of 4-inch PVC pipe, 2,500 LF of 6-inch pipe, 1,000 LF of water service lines and appurtenant work. Two service meters will be installed at which time all users on the system will be metered.

County:	Island	
Project Funding:	DWSRF Loan	\$165,038
	Other Sources*	\$17,804
	Total Project Cost	\$182,842

**Other funding sources include water rates, capital reserves, grants and loans.*

Water System Plan Requirement

DWSRF applicants are required to have a DOH - approved water system plan or small water system management program that includes the proposed project, by December 31, 2001, in order to remain on the funding list. Eleven out of 80 projects were removed from last year's funding list because they failed to meet the planning deadline! Potential applicants are strongly encouraged to contact their DOH regional office immediately to find out their planning requirements. The Public Works Trust Fund is offering a new planning loan program to municipalities. Information can be accessed at <http://www.crab.wa.gov/pwtf/programs.htm>, or by calling Enid Melendez at (360) 725-5012.

The small water system management program guide can be accessed at http://www.doh.wa.gov/ehp/dw/Our_Main_Pages/public.htm.

The DWSRF program guidelines and application can be accessed after March 1, 2001 at <http://www.crab.wa.gov/pwtf>. For more information, contact Chris Gagnon at (360) 236-3095, or email, chris.gagnon@doh.wa.gov.

DWSRF DRAFT RULE

The department is developing a state DWSRF rule as directed by the 1997 Washington State legislature to guide the provision of financial assistance under the DWSRF.

For the last four years the DWSRF loan program has been implemented consistent with guidelines set forth by the U.S Environmental Protection Agency (EPA).

EPA recently released the final rule formally establishing the guidelines that must be followed. It provides a foundation from which to develop our state DWSRF rule. The adoption of the state rule will not significantly change the requirements in the guidelines used over the last four years.

Information on the draft rule will be presented at the March workshops. The public review and adoption process for the rule will take place between March and July with a public hearing being scheduled for July. The final rule is scheduled to be effective in October 2001.

If you need further information or a copy of the draft rule please contact Sean Orr at (360) 236-3153 or email sean.orr@doh.wa.gov.



Drinking Water State Revolving Fund & Public Works Trust Fund Workshops

Agenda ~ 9:00 A.M. - 12:00 Noon

1. 2001 DWSRF Application Workshop/Draft Program Rule (*information session*)
2. 2002 Public Works Trust Fund Workshop

Agenda ~ 12:30 Noon - 2 P.M.

Bill Jarocki, from Boise State University's Environmental Finance Center will present a workshop on technical assistance on operation/capital finance challenges - getting the answers to the "How to Pay" questions.

LOCATIONS

- **March 13** ~ Spokane Hampton Inn Spokane, 2010 South Assembly Road, Spokane, WA 99224, (509) 747-1100, Sunset A Room
- **March 14** ~ Pasco DoubleTree Hotel - Pasco, 2525 North 20th Avenue, Pasco, WA 99301, (509) 547-0701, Project/Design Room
- **March 15** ~ Wenatchee - This workshop is tentatively scheduled and includes Public Works Trust Fund and technical assistance workshops only. DWSRF will not be covered.
- **March 20** ~ Kelso/Longview Red Lion Inn, 510 Kelso Drive, Kelso, WA 98632, (360) 636-4400
- **March 21** ~ Tacoma Shilo Inn, 7414 S Hosmer, Tacoma, WA 98408, (253) 475-4020
- **March 22** ~ Everett Holiday Inn, 101 128th St SE, Everett, WA 98208, (425) 337-2900

Free Workshop Registration Form



cut along line, follow instructions below

Please fill out and mail or fax to:

Public Works Board, PO Box 48319,
Olympia, Washington, 98504-8319
Attention: Beth Rockwell
Fax (360) 664-3029 • Phone (360) 725-5000

Name _____

Phone _____

Water System _____

Water System Address _____

Note: Loan application forms and guidelines available after March 1, 2001 on the internet at <http://www.crab.wa.gov/pwtf>

Workshop Sign-up

- ☐ Spokane
- ☐ Pasco
- ☐ Wenatchee (*PWTF only. Contact Beth Rockwell at 360-725-5000 for scheduling information.*)

☐ Kelso/Longview

☐ Tacoma

☐ Everett

Persons Attending _____

☐

DWSRF

☐

PWTF

☐

TA

Please check which sessions you will attend.

Request for Loan Application & Guidelines

☐ DWSRF #Requested _____

☐ PWTF #Requested _____

~ Workshops are Free ~

Water System Survey Shapes Division's Conservation Efforts

Preserving system capacity is the best reason to conserve water, according to a recent Division of Drinking Water survey of small and medium water systems.

More than 62 percent of respondents to the survey, conducted by an independent research firm last summer, rated safeguarding capacity highest among reasons to save water. Also ranking high from a list of six reasons was eliminating water waste, saving money, and the philosophical consideration that saving water is the "right thing to do."

Water conservation programs (both customer-based and system waste-reduction efforts) are an important part of preserving system capacity and improving operational efficiency. With the increasing difficulty and expense of developing new sources, many systems may find that wiser use of existing supplies is the most cost-efficient way to serve customers.

The statewide survey, which was mailed to 477 systems with fewer than 1,000 connections, is part of a major Department of Health effort to encourage water systems to develop water conservation programs. Results of the survey and other research will guide department efforts to assist systems in developing effective conservation programs. Conservation specialists in each regional office work with small and medium systems, offering technical and other assistance.

The survey also asked system operators what types of technical assistance would be most helpful in carrying out water-saving programs and activities. Slightly more than one-half responded that leak detection assistance was important, and another 30 percent were interested in help developing conservation programs. Information on facilities improvement and marketing conservation to customers also ranked high.

Complete results of the survey, and information about water conservation program assistance for small and medium systems are available by contacting a regional office conservation specialist:

Northwest Regional Office
Jennifer Kropack
(253) 395-6769

Southwest Regional Office
Jim Rioux
(360) 664-3952

Eastern Regional Office
Anita Albi
(509) 456-5067



Operator Certification Update

Group A community and nontransient noncommunity (NTNC) water systems will be required to have at least one certified operator beginning January 29, 2001, when revisions to chapter 246-292 WAC, Water Works Operator Certification, become effective. Revisions to the state regulations (chapter 246-292 WAC) were completed in late December 2000. Operator Certification staff will be mailing out the certificate of competency to the grandparented operators in March. In conjunction, the Washington Environmental Training Center (WETRC) will also be sending information to all grandparented operators. A notice of Open houses to be held this Spring for newly certified operators will be going out in the mail.

Additional information concerning changes in the operator certification rule can be found in the Autumn 2000 issue of the Water Tap. To obtain a copy of the Autumn issue contact the editor of the Water Tap, Division of Drinking Water, PO Box 47822, Olympia, WA 98504-7822, Email your request to DWINFO@doh.wa.gov or visit the Department of Health's website at <http://www.doh.wa.gov/ehp/dw>

For questions regarding grandparenting or the new requirements call the toll-free Operator Certification Hotline at 1-800-525-2536.



To register call these contacts...

WETRC

Washington Environmental
Training Center
253-288-3369

AWWA

American Water Works
Shauna Crane
206-362-8100

Judy Grycko
1-877-767-2992

WSEHA

Kathy Kimsey
425-334-5399

Dennis Campbell (DOH)
360-236-3158

Beth Rockwell
360-725-5000

Training and Education Calendar Feb. - June 2001

<u>Date</u>	<u>Topics</u>	<u>Location</u>	<u>Contact</u>
Feb 21-22	Process Control and Instrumentation	Auburn	WETRC
Feb 23	Asbestos Cement Pipe Work Practice Procedures	Auburn	WETRC
Feb 28	DOH Third Party Sanitary Survey Admin. Training*	Tacoma	Dennis Campbell
Mar 7	Telemetry & Supervisory Control for Managers & Supervisory Personnel	Bellevue	Shauna Crane
Mar 8	American Water Works Association Teleconference	Various	Judy Grycko
Mar 13	DW State Revolving Fund Application Workshops*	Spokane	Beth Rockwell
Mar 14	DW State Revolving Fund Application Workshops*	Pasco	Beth Rockwell
Mar 20	DW State Revolving Fund Application Workshops*	Kelso	Beth Rockwell
Mar 21	DW State Revolving Fund Application Workshops*	Tacoma	Beth Rockwell
Mar 21-22	Water Treatment and BTO Certification Exam Review	Yakima	WETRC
Mar 22	DW State Revolving Fund Application Workshops*	Everett	Beth Rockwell
Mar 26-29	Water/Wastewater Operations Workshop (WOW)	Ocean Shores	WETRC
Apr 3-4	Process Control and Instrumentation	Everett	WETRC
Apr 10-12	Basic Water Works	Yakima	WETRC
Apr 17-19	Water Distribution Certification Examination Review	Tacoma	WETRC
Apr 17-19	Pump Operation and Maintenance	Richland	WETRC
Apr 17-19	Basic Electrical	Auburn	WETRC
Apr 20	Asbestos Cement Pipe Work Practice Procedures	Auburn	WETRC
Apr 24-26	Chlorination System Operation and Maintenance	Yakima	WETRC
Apr 25	Seattle Public Util. Meter Testing Facility Tour & Wkshp	Seattle	Shauna Crane
Apr 25-27	WSEHA Annual Education Conference	Yakima	WSEHA
Apr 25-27	Basic Water Works	Everett	WETRC
May 1-3	Water Distribution Certification Examination Review	Everett	WETRC
May 2-4	PNWS American Water Works Assoc. Annual Conf.	Yakima	Judy Grycko
May 8-10	Cross Connection Control Specialist Cert. Review	Everett	WETRC
May 15-17	Water Distribution Certification Examination Review	Yakima	WETRC
May 22-24	Cross Connection Control Specialist Cert. Review	Richland	WETRC
May 23-25	Basic Electrical	Yakima	WETRC
June	Unique Water Projects Night	Bellevue	Shauna Crane
Jun 5-7	Pump Operation and Maintenance	Auburn	WETRC
Jun 8	Asbestos Cement Pipe Work Practice Procedures	Auburn	WETRC
Jun 12-13	Process Control and Instrumentation	Yakima	WETRC

Additional Training Links:

ERWOW Website - <http://www.ERWOW.org>

WETRC Website - <http://www.ivygreen.ctc.edu/wetrc>

*Indicates
training is less
than \$25.00

**For the complete Training Calendar visit the Drinking Water
Homepage & click on Training - www.doh.wa.gov/ehp/dw**

Plan Now to Attend!

The 23rd Annual Washington Water/Wastewater Operations Workshop (WOW) is scheduled for March 26, 27, 28 and 29, 2001 at the Shilo Hotel and Ocean Shores Convention Center.

Choose from 54 different technical training sessions over three days and design your own personal attendance schedule.

In response to the needs of both small water and wastewater systems, WOW is pilot testing a new Small Water And Wastewater Systems series that will focus on the needs of small system operation. If you operate a small system, you will find a variety of new training topics to assist you. You will also earn CEU (Continuing Education Units) toward your professional growth certification renewal requirement.

For registration information call the Washington Environmental Training Center (WETRC) at 253-833-9111 extension 3373 or toll-free in WA state 1-800-562-0858 extension 1.

Dr. Drip

Dear Dr. Drip:

Say! O' all-knowing one, I noticed last September that the commercial household bleach I had been buying at my local food market had changed. It now says it is "stronger" and better able to help with laundry washing with an added "surfactant." I have been using the stuff to disinfect my drinking water (both routinely and in emergencies) and am now wondering if it is still safe to use it for such purposes. Can I still use the bleach off the grocery store shelves?

~ I.M. Stumpt



Dear I.M.,

Yes, I too noticed that the manufacturers of the store-bought bleach had changed their formulation, and in some cases had added materials to help with laundering or to mask the scent of the bleach. It seems that most all manufacturers have increased the amount of the active ingredient (i.e., the oxidizing agent, hypochlorite) in their formulations from the old 4.75 – 5.25 percent to the new six percent. Some have also added ingredients, called surfactants, to help the effectiveness of laundry detergents. I have two answers to offer you based on whether the bleach contains just hypochlorite without other "additives," or whether it has had some material added to it to help with some of its intended uses.

New Formula with no other additives:

Since the new formulation reflects only a moderate increase in oxidizing strength (higher level of hypochlorite), the new products can be used similarly as in the past with the lower strength bleaches. For example, where the old formulation bleach (5.25%) was used to give a 1 mg/ L dose, the new bleach (6%) would give about a 1.14 mg/L dose using the same volume (a 14 percent increase). This difference is not sufficient to require adjustments to the quantities used for emergency disinfection of surfaces of pipes or reservoirs, or for emergency drinking water. For routine use of the new store-bought bleach for water disinfection, your current practices could still be used, although the dose will be a little higher than before. To get the same approximate dose as with the older bleaches, you would need to reduce the amount of new bleach used by about 14 percent.

Formulas with additives:

You should be careful with use of bleaches (either old or new) for drinking water protection that have additives (these are used for odor masking, or for helping with laundry uses). The State regulations provide an exception for the use of commercial bleaches for water disinfection that have not been certified under the ANSI/NSF 60 Standard (all other additives are required to be ANSI/NSF 60 certified), but do not allow such use if they contain additives. Bleaches with "additives" must receive NSF 60 certification if they are to be used for drinking water applications.

If you have some specific questions, you can contact the wonderful folks at your nearest Drinking Water Division's Regional Office, or Jim Hudson of the Headquarters Office. I'm sure they will be glad to help.

Sincerely ~ Dr. Drip

CCR Reminder:

July 1 is the due date for community water systems to deliver their Consumer Confidence Report to their customers. For information and a state certification form, visit www.doh.wa.gov/ehp/dw/Our_Main_Pages/consumer.htm.

EPA Announces Final Arsenic Rule

During the final days of the Clinton administration, EPA announced a final new rule protecting public health by strengthening the drinking water standard for arsenic. *(As Water Tap went to press, however, media reports indicated Bush administration officials were reviewing carefully a number of new rules for opportunities to stop or change them, including the arsenic rule. More up to date information may be available on the EPA website at www.epa.gov/safewater/arsenic.html)*

The new arsenic rule, as signed by EPA, changes the current federal drinking water standard for arsenic from 50 parts per billion (ppb) to 10 ppb. The new, more stringent standard addresses long-term health effects of exposure to low levels of arsenic in drinking water, including cancers and cardiovascular diseases.

"We support EPA's action to protect public health," said Division of Drinking Water Director Gregg Grunenfelder, "and will be working with water utilities in our state during the next few years to ensure they deliver drinking water that meets this new standard."

Water systems will have five years to come into compliance with the new arsenic standard.

This announcement culminates years of debate about protecting the public's health from arsenic in drinking water. It is expected to be among the most costly of new EPA rules to implement, requiring substantial investment by communities with arsenic problems as well as regulatory oversight by the Department of Health. In Washington, the new standard may require as many as 182 public water systems to take action addressing arsenic in their sources of drinking water.

In This Issue

The following people have contributed to the production of this issue of the Water Tap: Chris Gagnon, Gregg Grunenfelder, Jim Hudson, Janice Keller, Steve Kelso, Meliss Maxfield, Judy Sides, Ronni Woolrich, and Brad Wright of Wright Communications.

The Water Tap is published by the Department of Health, Division of Drinking Water, to provide information on subjects of interest to water system owners, water works operators and others interested in drinking water. Comments and questions are welcome. Past issues are available by writing to the editor, the Water Tap, Division of Drinking Water, PO Box 47822, Olympia, WA 98504-7822 or Email your request to DWINFO@doh.wa.gov. Past issues are also available on our website <http://www.doh.wa.gov/ehp/dw>

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Water Works Wonders!
Drinking Water Week is
May 6-12, 2001
The American Water Works Association provides a wealth of information to assist water systems in their public education activities on their website www.awwa.org/dw

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